
Ski binding, especially touring, telemark or
cross-country binding

(New) patent claims 1-12

1. Ski binding, especially touring, telemark or cross-country ski binding (10), for securing a ski boot that comprises a leg and a sole, which binding has

- a front retaining element (12) associated with the front end of the sole,
- a rear retaining element (15) formed to engage on the foresole or on the heel of the ski boot, and
- a biasing device (19), effective between the front and rear retaining elements, by means of which the ski boot is clampable between the front and rear retaining elements in such a manner that the heel thereof is freely liftable, wherein

the front retaining element (12) is pivotally mounted relative to the binding (10, 11) and the ski on the one hand, and relative to the rear retaining element (15) on the other hand, about an axis (13) which extends transversely to the longitudinal direction of the binding and sole and approximately parallel to the sole tread, and the rear retaining element (15) is pivotally mounted about an axis which extends transversely to the longitudinal direction of the binding and sole or ski and approximately parallel to the sole tread and to the top face of the ski,

characterised in that

the front retaining element (12) is a bracket (18) which engages over the front end of the sole of the ski boot, which bracket is pivotally mounted on the binding, about a horizontally extending transverse axis (13), both relative to the binding (10) and to a mounting plate (11) associated therewith or to a housing associated therewith, and relative to the rear retaining element (15), and in that the pivotal axis for the rear retaining element (15) coincides with the pivotal axis for the front retaining element (12).

2. Binding according to claim 1,

characterised in that

arranged between the rear retaining element (15) and the front retaining element (12) is a biasing device (19), especially a spring biasing device.

3. Binding according to claim 1 or 2,

c h a r a c t e r i s e d i n t h a t

in closed position, that is to say in the forward direction, the biasing device (19) is prebiased.

4. Binding according to claim 3,

c h a r a c t e r i s e d i n t h a t

the rear retaining element (15) is fixable in the open position of the binding, the fixation being releasable on stepping into the binding (step-in mechanism).

5. Binding according to any one of claims 1 to 4,

c h a r a c t e r i s e d i n t h a t

at the rear end of a connecting member (16), which is pivotally mounted about a horizontal transverse axis (13), the rear retaining element (15) is mounted so as to be longitudinally displaceable (double arrow 17), the pivotal axis of the connecting member (16) defining the pivotal axis (13) associated with the rear retaining element (15).

6. Binding according to claim 5,

c h a r a c t e r i s e d i n t h a t

the connecting member (16) is a plate which is flexurally resilient in the longitudinal section plane of the binding (10).

7. Binding according to claim 6,

c h a r a c t e r i s e d i n t h a t

the biasing device (19) is arranged on the connecting member (16).

8. Binding according to any one of claims 1 to 7,

c h a r a c t e r i s e d i n t h a t,

by means of an operating mechanism, the rear retaining element (15) is movable against the action of the biasing device (19) into the open position.

9. Binding according to any one of claims 1 to 8,

characterised in that

the rear retaining element (15) comprises a retaining cable, or a retaining bracket, especially a retaining bracket (22) which engages on the underside of the foresole.

10. Binding according to any one of claims 1 to 9,

characterised in that

the rear retaining element (15) comprises two jaws pivotable about approximately vertical axes, which jaws can be pivoted out laterally against the action of a resilient element, especially a compression spring or torsion spring, to release the ski boot laterally.

11. Binding according to any one of claims 1 to 10,

characterised in that

there is associated with the front retaining element (12), in front of the pivotal axis (13) thereof, a resilient element (flexor 14), between which element and the portion (18) of the front retaining element (12) that engages over the front end of the sole the front end of the sole can be placed, the resilient element (flexor 14) being removable if required.

12. Binding according to any one of claims 1 to 11,

characterised in that

the front retaining element (12) is formed in the manner of a pivotally mounted toe bail.